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# Terms of Reference

# Team Leader for Development of a Decision toolkit for Off-grid Energy Solutions

## Background and Introduction

*<Rationale for the project, project history and list of relevant studies, need for consultant in the project and issues to be resolved, source of financing.>*

## Objective

This activity will review the experience, knowledge, examples and models developed in [Donor] projects and others from across regions to determine what has worked and what has not in the past. Based on this analyses, the project will help develop guidelines, tools, and templates such as energy needs assessment tools, technology design and screening tools, cost effectiveness, economic and financial analysis methodology and templates, procurement guidelines, technical specifications, associated Terms of Reference (TOR), technology and good practice case studies etc. to aid the more effective design and implementation of off-grid projects/programs inhealth, education and water sectors.

## Scope of Work

Working in close concert with the [Donor] Task Team and other [Donor] and project staff, the Team Leader will lead the implementation of the activity. In particular, the Team Leader will work closely with the Senior Energy Expert to perform the following key tasks:

Task 0:Meet with the [Donor] Team and Senior Energy Expert to discuss the TOR, allocation of tasks and responsibilities, schedule and expected deliverables. Issue an Inception Report for the activity after the meeting.

Tasks 1 - 8: Lead the effort in completion of these tasks, as defined in the attached activity TOR. The Team Leader will have primary responsibility for completion of these tasks, but would rely on inputs from the Senior Energy Expert and [Donor] team members.

It is also envisaged that the development of this Toolkit will require various levels of stakeholder and expert consultations. The Team Leader will develop a plan, in concert with the [Donor] team, in identifying such stakeholders and recommending logical steps and interim deliverables for broader circulation and review/comments.

See Annex 1 for details

## Schedule

The assignment is envisaged to last 72 days. The schedule of deliverables will be as detailed in the attached TOR for the activity and as agreed under Task 0. For the duration of this assignment, the Team Leader will report directly to [person] and interact closely with the Task Team.

# Annex 1

# Full Scope of Work

## Background and Introduction

*<Rationale for the project, project history and list of relevant studies, need for consultant in the project and issues to be resolved, source of financing.>*

## Objective

This activity will review the experience, knowledge, examples and models developed in [Donor] projects and others from across regions to determine what has worked and what has not in the past. Based on this analyses, the project will help develop guidelines, tools, and templates such as energy needs assessment tools, technology design and screening tools, cost effectiveness, economic and financial analysis methodology and templates, procurement guidelines, technical specifications, associated Terms of Reference (TOR), technology and good practice case studies etc. to aid the more effective design and implementation of off-grid projects/programs inhealth, education and water sectors. The main output of the activity will be a good practice note together with links and annexes that would serve as a toolkit to support the work of [Donor] staff, and others, who are assessing off-grid energy solutions for education, health and water services, particularly in [Region].

## Scope of Work

The decision toolkit for SPVs (the toolkit) will be prepared by a team comprising of two consultants - a Team Lead and a Senior Energy Expert - and members of the [Donor] task team. Towards the preparation of the toolkit, the selected consultants will be expected to perform the following key tasks:

Task 0 – Brainstorming Meeting. The consultants will participate in brainstorming meeting with the [Donor] Task Team and selected [Donor] team leaders, to discuss the scope and design of the toolkit as well as other related issues such as the TOR, allocation of tasks and responsibilities, schedule and expected deliverables.

Task 1 – Review of Past Project Documents and Experiences. The consultants will review the past project documents (both [Donor] and non-[Donor]) from various in order to understand and document the various modalities and experiences. The consultants will also, as necessary, interview key [Donor] staff and selected country counterparts, to supplement their understanding of the project analyses and experiences.

Task 2 – Develop Preliminary Toolkit Design. Based on the review and their experiences, the consultants will develop a preliminary design for a SPV toolkit. This design should specify the format and structure of the toolkit, provide an outline of the toolkit, list the types of tools and documents to be included, and recommend other features. The consultant would present their preliminary design to the [Donor] Task Team for discussion and comments.

Task 3 – Develop Draft List of Toolkit Content and template development. The consultants will then prepare an outline of the good practice note together with annexes of actual documents and tools that would serve as a toolkit to support the work of [Donor] staff, and others, who are assessing off-grid energy solutions for education, health and water services. The main source of such content would come from earlier projects, which were reviewed by the Consultant and deemed to be of reasonable quality under Task 1. However, the consultants are also expected to propose some supplemental content which they would develop if the materials did not previously exist or if earlier documents were considered to be of poor quality or too project/country specific. At a minimum, the toolkit should cover the following topics:

1. Technical issues covering technology and product performance, developments and options, components and system designs, technical specifications certifications, testing and commissioning
2. Economic and viability issues including demand assessments, resource assessments, and decision trees
3. Financing covering best practice approaches for addressing the issue of high capital costs
4. Institutional and organizational issues including those related to SPV installation, Operations and Maintenance and co-operation among different government ministries and some guidance on policy and legislative issues
5. Procurement including different public and private options
6. Community participation, particularly ways to engage local communities in different stages.
7. Climate change related issues such as greenhouse gas benefits to the extent that interventions can benefit from Clean Development Mechanism

The toolkit should, at a minimum, include following tools and models documents:

* A decision-making guidance tool (decision tree) to be used to select technologies for meeting the energy needs in health, education, and water supply sectors. The decision-making guidance tool will include energy needs assessment tool, least-cost technology screening tool, energy choice, and technology conceptual design tool and institutional and implementation model screening.
* Guidance material, templates and spreadsheets for undertaking cost effectiveness, economic and financial analyses of off-grid energy options.
* Guidelines on specifying performance requirements, examples of expressions of interest (EoIs) and requests for proposals (RFPs) and technical specifications, including equipment, installation and service standards.
* Business and implementation models.
* Model procurement specification and bid documents for supply, installation, and operations and maintenance (O&M) of off-grid systems.
* Guidelines on prequalification criteria and on evaluating suppliers, installers and service providers.
* Model TORs for different components of project design, procurement, verifications and commissioning and implementation supervision.
* Case studies of both successful and unsuccessful approaches and other reference material (such as list of suppliers/products/other relevant contacts).
* Monitoring and evaluation documents (including impact and process evaluation reports, project performance indicators, etc).

Task 4 – Develop Agreed Content and Create Draft Toolkit. The consultants will then proceed to develop the agreed content and include the new and existing materials into a draft toolkit. The consultants will first present this draft to the [Donor] team for detailed review and comment, followed by a larger group of [Donor] staff that had either worked on such programs or plan to in the near future. The content and toolkit design would be modified and refined based on feedback received.

Task 5 – Implement a Stakeholder Workshop and consultations. The consultants will also support the [Donor] task team with the organization and implementation of (i) consultations with [Donor] sector staff and (ii) a stakeholder workshop to be held in the region in conjunction with an event of the [Donor], where both public and private sector stakeholders will be invited to discuss the initial findings of the Summary Report, toolkit design and select content for broader peer review and feedback. The Consultants will be asked to present the preliminary design of the toolkit and any key findings at the time of the event.

Task 6 – Refine and Finalize Toolkit. The consultants will then revise the toolkit content as required based on feedback and subsequent discussions with the [Donor] Task Team. The consultants would submit a final product to the [Donor], based on the agreed format. If the toolkit will be web-based, the consultants may be asked to work with the IT consultant to ensure the materials are properly uploaded and all links and downloads are functional.

Task 7 – Training Workshops/BBLs. The consultants will prepare and deliver one or more half day clinic/training workshops on the key elements of the toolkit to [Donor] staff and selected external participants. Based on comments, the consultants will revise and finalize the power point presentation prepared for the workshop and submit to the [Donor] for future use at external conferences and events.

Task 8 – Prepare a Practice Note. The consultants will also develop a short 4-page note, based on the good practice note and Toolkit, for wider dissemination within and outside the [Donor]. This note should summarize the essential aspects, issues and analytical underpinnings of off-grid energy programs.

## Schedule

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| **Task/Output** | **Date** |
| Brainstorming meeting (through VC) | 1st month |
| Completion of background document review and initial interviews | 2nd month |
| Presentation of preliminary toolkit design | 2nd month |
| List of toolkit content | 3rd month |
| Draft toolkit with content | 4th month |
| Consultations with [Donor] Staff (SDN Week) | 5th month |
| Stakeholders Workshop | 7th month |
| Final toolkit | 8th month |
| Training Workshop at the [Donor] | 8th /9th month |
| Best Practice Note | 10th month |